

DESCRIPTION

Protein AMSH and cDNA thereof

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Technical Field

10 The present invention relates to human protein hAMSH and mouse protein mAMSH, and cDNAs encoding these proteins. More particularly, the present invention relates to novel human and mouse signal transduction molecules, AMSH, human and mouse genes encoding these proteins, cDNAs thereof, and antibodies against these proteins.

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Background Art

20 A variety of cells having different functions should collaborate with each other for expression of higher biological functions such as hematopoietic, immunological and nervous systems. Communication among the cells is essential for their collaborations. Cytokines are known to be the proteins responsible for intercellular communication, and include interleukin (IL)-1 to 18, colony stimulation factors (CSFs), interferons (IFNs) and several chemokines.

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30 Signals are generated by binding of the cytokines to specific receptors on the cell membrane, and survival, proliferation, differentiation and functional expression of the cells are controlled by signal transduction. Accordingly, dysfunction of cytokine-receptor signal transduction pathways result in collapse of the immunological and hematopoietic systems to cause severe infectious diseases, cancers and autoimmune diseases.

CLAIMS

1. A human protein hAMSH having the amino acid sequence of SEQ ID No. 1.
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2. A human gene encoding the human protein hAMSH of claim 1.
3. cDNA of the human gene of claim 2, which is hAMSH cDNA having the nucleotide sequence of SEQ ID no. 2.
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4. A DNA fragment comprising a partial sequence in the nucleotide sequence of SEQ ID No. 2.
5. A recombinant vector containing the hAMSH cDNA of claim ^{3.}~~4~~ or the
15 ~~DNA fragment of claim 4.~~
6. An antibody against the human protein hAMSH of claim 1.
7. A mouse protein mAMSH having the amino acid sequence of SEQ ID No. 3.
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8. A mouse gene encoding the mouse protein mAMSH of claim 7.
9. cDNA of the mouse gene of claim 7, which is mAMSH cDNA having the nucleotide sequence of SEQ ID no. 4.
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10. A DNA fragment comprising a partial sequence in the nucleotide sequence of SEQ ID No. 4.
- 30 11. A recombinant vector containing the mAMSH cDNA of claim 9, or the
~~DNA fragment of claim 10.~~